

CERTIFICATE

of constancy of performance

1922 - CPR - 1595

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Fire detection and fire alarm systems. Heat detectors - Point heat detectors. Smoke detectors. Point detectors using scattered light, transmitted light or ionization. Components using radio links. teknlm TWD-1850 Wireless Addressable Multi Detector (Optical Smoke, Fixed Heat, Heat Rise)

(For list of controlled characteristics, see Annex I, Annex II and Annex III to 1922 - CPR - 1595 that are an inseparable part of this certificate)

placed on the market under the name or trade mark of

Bilgi Elektronik Sanayi ve Ticaret A.Ş.

**Dudullu Organize Sanayi Bölgesi 1. Cadde İsmet Tarman İş Merkezi No:1, Kat:2
D.32 Ümraniye, İstanbul, Turkey**

and produced in the manufacturing plant of

Bilgi Elektronik Sanayi ve Ticaret A.Ş.

**Dudullu Organize Sanayi Bölgesi 1. Cadde İsmet Tarman İş Merkezi No:1, Kat:2
D.32 Ümraniye, İstanbul, Turkey**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

**EN 54-5:2017+A1:2018; EN 54-7:2018; EN 54-25:2008, EN 54-25:2008/AC:2010,
EN 54-25:2008/AC:2012;**

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.

This certificate was first issued on 14.09.2021 and will remain valid until 28.11.2023 as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body. The certificate is supported through annual surveillance audit and is reissued after each surveillance audit. The validity of the certificate may be confirmed in the CE register at the web address www.dedal-bg.net.



Embossed stamp of "Dedal - A&C" Ltd.



Attestation &
Certification

Manager:

Anna Vasileva



dipl. eng. Anna Vasileva

Issued:
Burgas, 14 September 2021

Ref. No. 01-00

ANNEX I TO CERTIFICATE OF CONSTANCY OF PERFORMANCE 1922 - CPR - 1595/14.09.2021

Performance list, acc. to EN 54-5:2017+A1:2018

Essential Characteristics	Performance	Clause
Operational reliability		
- Position of the heat sensitive elements	Pass	4.2.1
- Individual alarm indication	Pass	4.2.2
- Connection of ancillary devices	N/A	4.2.3
- Monitoring of detachable detectors	Pass	4.2.4
- Manufacturing adjustments	Pass	4.2.5
- On-site adjustment of response behaviour	N/A	4.2.6
- Software controlled detectors (when provided)	Pass	4.2.7
Nominal activation conditions / sensitivity /		
- Directional dependence	Pass	4.3.1
- Static response temperature	Pass	4.3.2
- Response times for typical application temperature	Pass	4.3.3
- Response times for 25 °C	N/A	4.3.4
- Response times from high ambient temperature	Pass	4.3.5
- Reproducibility	Pass	4.3.6
Response delay (response time)		
- Additional test for suffix S point heat detectors	Pass	4.4.1
- Additional test for suffix R point heat detectors	N/A	4.4.2
Tolerance to supply voltage		
- Variation in supply parameters	Pass	4.5
Durability of Nominal activation conditions /Sensitivity		
Temperature resistance		
- Cold (operational)	Pass	4.6.1.1
- Dry heat (endurance)	N/A	4.6.1.2
Humidity resistance		
- Damp heat, cycling (operational)	Pass	4.6.2.1
- Damp heat, steady-state (endurance)	Pass	4.6.2.2
- Corrosion resistance: Sulphur dioxide (SO ₂) corrosion (endurance)	Pass	4.6.3
Vibration Resistance		
- Shock (operational)	Pass	4.6.4.1
- Impact (operational)	Pass	4.6.4.2
- Vibration, sinusoidal (operational)	Pass	4.6.4.3
- Vibration, sinusoidal (endurance)	Pass	4.6.4.4
Electrical stability		
- (EMC), Immunity (operational)	Pass	4.6.5



Manager:

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ANNEX II TO CERTIFICATE OF CONSTANCY OF PERFORMANCE 1922 - CPR - 1595/14.09.2021

Performance list, acc. to EN 54-7:2018

Essential Characteristics	Performance	Clause
Operational reliability		
- Individual alarm indication	Pass	4.2.1
- Connection of ancillary devices	N/A	4.2.2
- Monitoring of detachable detectors	Pass	4.2.3
- Manufacturer's adjustments	Pass	4.2.4
- On-site adjustment of response behavior	Pass	4.2.5
- Protection against the ingress of foreign bodies	Pass	4.2.6
- Response to slowly developing fires	Pass	4.2.7
- Software controlled detector (when provided)	Pass	4.2.8
Nominal activation conditions / Sensitivity		
- Repeatability	Pass	4.3.1
- Directional dependence	Pass	4.3.2
- Reproducibility	Pass	4.3.3
Response delay (response time)		
- Air movement	Pass	4.4.1
- Dazzling	Pass	4.4.2
Tolerance to supply voltage		
- Variation in supply parameters	Pass	4.5
Performance parameters under fire conditions:		
- Fire Sensitivity	Pass	4.6
Durability of Nominal activation condition/ Sensitivity		
Temperature resistance		
- Cold (operational)	Pass	4.7.1.1
- Dry heat (operational)	Pass	4.7.1.2
Humidity resistance		
- Damp heat, steady - state (operational)	Pass	4.7.2.1
- Damp heat, steady - state (endurance)	Pass	4.7.2.2
Corrosion resistance		
- Sulfur dioxide (SO ₂) corrosion (endurance)	Pass	4.7.3
Vibration Resistance		
- Shock (operational)	Pass	4.7.4.1
- Impact (operational)	Pass	4.7.4.2
- Vibration, sinusoidal (operational)	Pass	4.7.4.3
- Vibration, sinusoidal (endurance)	Pass	4.7.4.4
Electrical stability		
- EMC, immunity (operational)	Pass	4.7.5



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ANNEX III TO CERTIFICATE OF CONSTANCY OF PERFORMANCE 1922 - CPR - 1595/14.09.2021

Performance list, acc. to EN 54-25:2008, EN 54-25:2008/AC:2010, EN 54-25:2008/AC:2012

Essential Characteristics	Performance	Clause
Performance under fire conditions		
- Radio frequency links	Pass	4.2
- Alarm signal integrity	Pass	4.2.2
- General	Pass	5.2
- Reproducibility test	Pass	8.3.7
Response delay (response time to fire)		
- Test for alarm signal integrity	Pass	8.2.3
- Test for mutual disturbance between systems of the same manufacturer	Pass	8.2.6
Operational reliability		
- Immunity to site attenuation	Pass	4.2.1
- Identification of the RF linked component	Pass	4.2.3
- Receiver performance	Pass	4.2.4
- Immunity to interference	Pass	4.2.5
- Loss of communication	Pass	4.2.6
- Antenna	Pass	4.2.7
- Power supply equipment	Pass	5.3
- Environmental related requirements	Pass	5.4
- Documentation	Pass	6
- Marking	Pass	7
- Test for immunity to site attenuation	Pass	8.2.2
- Test for identification of RF linked components	Pass	8.2.4
- Test for identification of RF linked components	Pass	8.2.5
- Test of compatibility with other band users	Pass	8.2.7
- Test for the detection of a loss of communication on a link	Pass	8.2.8
- Test of the antenna	Pass	8.2.9
- General	Pass	8.3.1
- Test schedule for components tests	Pass	8.3.2
- Verification of the service life of the autonomous power source(s)	Pass	8.3.3
- Test for the low power condition fault signal	Pass	8.3.4
- Test for the polarity reversal	Pass	8.3.5
- Repeatability test	Pass	8.3.6
Durability of operational reliability and response delay, temperature resistance		
- Dry heat (operational)	Pass	8.3.9
- Dry heat (endurance)	Pass	8.3.10
- Cold (operational)	Pass	8.3.11
Durability of operational reliability, vibration resistance		
- Shock (operational)	Pass	8.3.16
- Impact (operational)	Pass	8.3.17
- Vibration, sinusoidal (operational)	Pass	8.3.18
- Vibration, sinusoidal (endurance)	Pass	8.3.19
Durability of operational reliability, humidity resistance		
- Damp heat, cyclic (operational)	Pass	8.3.12
- Damp heat, steady state (operational)	Pass	8.3.13
- Damp heat, steady state (endurance)	Pass	8.3.14
Durability of operational reliability, corrosion resistance		
- SO2 corrosion (endurance)	Pass	8.3.15
Durability of operational reliability, electrical stability		
- Electromagnetic compatibility (EMC), immunity tests (operational)	Pass	8.3.20



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